

Linda Adler-Kassner, UNIVERSITY OF CALIFORNIA, SANTA BARBARA, ladler@ucsb.edu
Margarita Safronova, UNIVERSITY OF CALIFORNIA, SANTA BARBARA, m_safronova@ucsb.edu
Yasmine Dominguez-Whitehead, UNIVERSITY OF CALIFORNIA, SANTA BARBARA,
ywhitehead@ucsb.edu
Karen Gonzalez, UNIVERSITY OF CALIFORNIA, SANTA BARBARA, Kareng4322374@gmail.com
Stephanie Nguyen, UNIVERSITY OF CALIFORNIA, SANTA BARBARA,
stephanietnguyen@umail.ucsb.edu
Malaphone Phommasa, UNIVERSITY OF CALIFORNIA, SANTA BARBARA,
mphommasa@ucsb.edu

Sense of Place and Belonging: Lessons from the Pandemic

ABSTRACT

This study investigates how students experienced a sense of place and a sense of belonging in both in-person and virtual learning environments by analyzing student interview data. As educators and university students grapple with the ongoing COVID-19 pandemic, we consider how students experience the presence and absence of sense of place and belonging, and how this could inform faculty and staff practices. We conclude by offering recommendations for university educators, with a particular focus on the benefits of building communities of practice.

KEYWORDS

pandemic learning, remote learning, in-person learning, higher education, communities of practice

INTRODUCTION

It's kind of like being at a party but not really knowing anybody. So it's like you're kind of there and you kind of tune in, or you hear other people's conversations but you know you're not really attached to that one.

This is how Richard,¹ a first-year student at a large, research-intensive university, described a class that he liked during his first term in college, October 2020. Richard used this “party” metaphor as part of a longer discussion of the “weirdness” (his word) of starting college remotely, as all students at his university did that term. We interviewed Richard as part of a study to learn about what it was like for incoming first-year and transfer students to start college without physically being at college. The group of us—faculty, academic staff, and undergraduate students—wondered what a university transition for students who are away from the physical campus might look like and what we might learn as we seek to foster positive learning experiences for continuing and incoming students as campuses grapple with the ongoing COVID-19 pandemic. Even when we interviewed Richard and the other students in this study,

it was clear that we would need to spend time learning about students' "pandemic learning" experiences, especially their experiences of learning and belonging, because those experiences were likely to have ramifications for those students' entire time on campus.

Our interest in students' experiences stemmed from our roles and research interests. Linda is a longtime faculty member in writing studies who researches how students and faculty define and experience knowledge-making across disciplines, especially through writing; Linda also helps to lead faculty development for the campus. Margarita works with faculty across disciplines to implement innovations that seek to foster a stronger sense of belonging in large courses. Yasmine supports incoming students by promoting equitable practices that help them access institutional knowledge and resources. Karen, a senior in 2021–2022, was a transfer student, peer mentor, and researcher interested in studying the factors that influence how students thrive or struggle in a university. Stephanie is an undergraduate student and peer mentor interested in promoting the success of first-generation college students. Malaphone develops initiatives that support first-generation college students and transfer students to promote their full participation in the research university experience.

Our curiosity about students' experiences during remote learning was piqued after a faculty member contacted Linda with a question: the faculty member could see that a first-year student's parent was by the student's side as they asked questions and sought assistance in the faculty member's course. Since Linda was the chair of the department in which the course was offered and a pedagogy consultant for the campus, the faculty member sought advice about how to handle the situation—in U.S. universities, the expectation is that parental involvement in learning will be minimal (or none). But Linda realized that for the student and parent, the college classes the student was taking in October 2020 probably did not seem very different than those they took in April 2020—both, after all, were taking place online; both used a learning management system; both were about "school subjects." Linda then started to wonder: What would signal to the student that this was a different learning space, other than the different instructors and/or course subjects? Linda then began to think about the many presentations that she gave for faculty, students, and parents, where she referred to students "moving from one class to another: chemistry to English; history to geography." What happened, Linda began to wonder, when this movement was not only absent, but the student likely remained in the same location they had been the previous year—and perhaps many years prior to that?

This realization led the research team to recognize just how much residential research-intensive institutions like ours rely on the campus to orient students to a change in place for learning. As we reflected on students' experiences on our university campus, we wondered (and worried) whether the absence of a physical campus might interfere with students' sense of belonging, integrally linked to place, that seemed important for feeling part of communities of practice. With this in mind, we designed a study that would enable us to understand: did students perceive a connection between learning, place, and belonging prior to the pandemic, and did they in their first-term college courses, which began in October 2020? We pursued this study through the following research questions:

- How did students experience belonging during in-person learning immediately before the pandemic, and how/was that belonging connected to place?
- How did students experience belonging during virtual learning in the early phases of the pandemic, and how/was that belonging connected to place?
- How can in-person and virtual experiences of belonging and place inform post-pandemic learning?

The questions guiding our study reflect the need to learn more about elements that are critical for successful learning during a period when learning has been disrupted: opportunities to recognize and participate in practices that are integral to communities of practice like college courses, and the connection between those opportunities and the cultivation of a sense of belonging within courses and the campus itself. We contend these opportunities are in fact integrally connected: that the sense that one belongs to a community of practice entails a sense of place in that community. We draw here on Agnew's (1987) definition of sense of place, "the ability to identify with and feel a sense of 'belonging'" in a specific location (Ngo and Brklacich 2014, 54). While virtual places that serve as the boundaries of communities of practice can convey this sense of place, we recognized that we did not know how (or whether) students experienced classes as communities of practice in their in-person learning or how (or whether) they experienced classes in the same way during remote learning, when the crucial element of place that seems integral to a sense of belonging in communities of practice seemed to be missing. Understanding students' experiences of the interactions between communities of practice and their sense of place and belonging in pre-pandemic physical classes and during remote learning can also inform practices as students return to physical campuses and participate in a hybrid learning life.

After a brief review of the literature associated with communities of practice, sense of place, and sense of belonging, we highlight findings (about experiences of connection between learning, place, and belonging) that emerged from interviews with 25 university students in their first term of enrollment. Our interview participants include both students entering as full-degree (four year) students, and students transferring from other institutions, typically in their last two years of university study, referred to in U.S. higher education as "transfer students."

LOCATING LEARNING IN A COMMUNITY OF PRACTICE

We began this study from the perspective that successful learning requires participation in specific ways of approaching and creating knowledge within academic disciplines, especially for novice learners, who are considered new entrants into these sites. But academic disciplines are not uniform. Within them, expert practitioners create and represent knowledge in ways that are distinct and distinguish one discipline from the next. These ways of creating and representing knowledge also inform ideas about what is considered "correct" and "incorrect" in the discipline. As Lerner (2016) explains, disciplinary distinctions are reified through writing; "any disciplinary genre speaks to the process by which members of a discipline shape, make distinct, and value its forms and practices of knowledge creation and communication" (41).

The specific ways that disciplines approach, investigate, and share what is learned about knowledge are among the characteristics that make it possible to identify disciplines as communities of practice: sites where people share common language, rituals, strategies for learning, and ways of approaching and representing knowledge. Joining a community of practice requires learning about how the community functions and how to belong: language, rituals, and strategies for learning how to learn. Within communities of practice, expectations are continually reinforced by experts/insiders providing the learning. Novice learners are successful when they are determined, by virtue of their abilities, to participate in the learning practices. As such, Wenger (1998) explains, "practice refers to a level of social structure that reflects shared learning" (126).

Communities of practice are also bounded: the forms of participation, reification, and learning that lead to membership in one community of practice are what distinguishes those acts from different

forms of the same acts in another community of practice (Wenger 1998, 103). Different communities' practices can be aligned or overlap—but especially for novice learners, there is significant emphasis on learning and practicing with defining practices of the community first. One only needs to think about a course like introductory biology, chemistry, physics, or economics to see the ways in which they are intended to bring students into participating in the “ways of thinking and practicing” (Hounsell and Anderson 2009, 78) of these disciplines: thinking and acting like a biologist, a chemist, or a physicist. The boundaries surrounding these communities of practice are sometimes most visible, in fact, when they are violated—when a student asks the wrong kind of question, finds not-quite-right evidence or interprets the evidence in ways that are not acceptable, or writes about what they have learned in ways that are determined to be incorrect or inappropriate (Adler-Kassner et al. 2016).

For incoming students, place serves multiple purposes associated with boundary-creating. Arriving on the campus as a new student signals a transition for students (moving from high school or community college to university); moving around the campus from one classroom building to another can stand in as physical manifestations of movement between communities of practice. Many campuses are designed to convey this difference: at the University of California, Santa Barbara, the library serves as a central hub. STEM buildings are to the east; social science/humanities buildings are to the west. Different places on campus, then, also represent different ways of thinking, and these ways of thinking are part of what is necessary for belonging and learning success. For university students, being part of communities of practice represented in and by these physical spaces is central to belonging (Nunn 2021). It is also noteworthy that online communities of practice are possible, and that the technology used for these presents both advantages and disadvantages (Johnson 2001). Even prior to the pandemic, the design and implementation of online academic communities had been investigated, with an emphasis on examining how they could be sustained (Kirschner and Lai 2007).

Classes or activities, then, can serve as communities of practice. For instance, there are behaviors in courses (in any school, regardless of grade level) that are associated with “successful learners”; there is also subject matter knowledge that is developed and demonstrated in particular ways as a result of these behaviors. These behaviors might include a great deal of interaction in one class where collaborative learning is incorporated, but less interaction in another where students are expected to perform on their own. These practices change across communities of practice. Thus, the concept of community of practice and learners' movements across and within communities of practice present fruitful ways to understand learners' experiences because they illustrate that context and place are consequential for learning (Blair 2013).

EXPERIENCING SENSE OF BELONGING AND SENSE OF PLACE

In considering sense of belonging, we begin with Strayhorn's foundational definition of belonging: “a feeling or sensation of connectedness, and the experience of mattering or feeling cared about... by faculty, staff and peers” (Strayhorn 2018, 4). Our research is more explicitly concerned with one of the three types of belonging identified by Nunn (2021), academic belonging (11–12). This is the feeling that one belongs, is connected to, and can contribute to academic communities. Academic belonging is distinct in that it is not concerned with fitting in at the broad campus level (campus-community belonging) or having a close group of friends on campus (social belonging), but instead comes when students “feel seen” and encounter faculty who “acknowledge their efforts, regardless of outcome” (Nunn 2021, 95). Students who experience academic belonging have the confidence to “raise

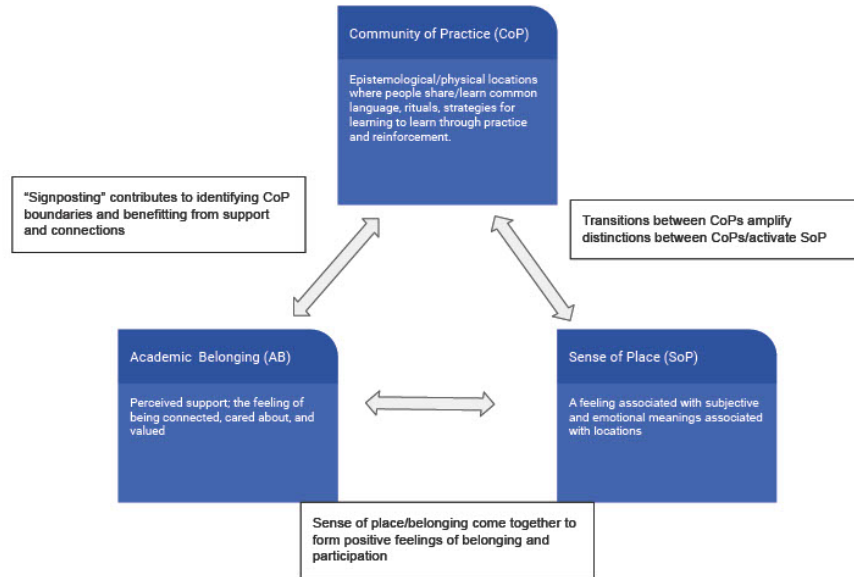
their hands in lecture to ask a question or make a comment” and they “participate in study groups without worrying” about disappointing their peers (Nunn 2021, 67). As we began this study, we were highly attuned to the ways in which the university under study, where more than 90 percent of students live on campus or in the community immediately adjacent to the campus, leaned on the campus itself for academic belonging. All students on the campus are expected to enroll full-time, as well. And while online universities can be valuable and offer flexibility and dynamic virtual learning opportunities (Mehdipour and Zerehkafi 2013), the university under study has a strong tradition of fostering learning on campus. Prior to March 2020 (when the campus transitioned to remote learning), less than one percent of courses were offered online. The “applying” page on the campus’s main website features photographs of students working together, often outside, and the “visit” link stresses the physical features of the campus. The combination of epistemological and ontological place and physical location were part of a “sense of place” that the campus invoked to foster academic belonging.

Our interest in whether students felt a sense of academic belonging in the absence of the physical campus and the specific physical markers of classes as communities of practice led us to consider connections between place and academic belonging (e.g., Jorgensen and Stedman 2011; McCunn and Gifford 2018; Williams and Stewart 1998). Instructors in an academic place—a class—can signal movement and transition by outlining the learning context of the class through explicit discussion of that context (from naming key concepts, to identifying and reiterating course learning outcomes, to invoking other strategies to make the disciplinary context more explicit) (see, Adler-Kassner and Wardle 2015; Adler-Kassner, Majewski, and Koshnick 2012). Movement from one physical location to another can also signal transitions between disciplines. For example, big lecture halls indicate one way of learning; smaller classrooms another. These physical features contribute to “place imagability,” the ways that “physical codes and signs” (i.e., nodes, paths, landmarks, and so on) have been shown to impact peoples’ overall images of a location, as well as their spatial navigation (McCunn and Gifford 2018, 210). We borrow “place imagability” to think about the ways that people create navigational aids and strategies—“signposting”—in the experiences of participants in our study. McCunn and Gifford (2018) speculate that “only when [these] codes and signs are imageable do spatial representations...become more coherent...” (210). In the same way that codes and signs help spatial representations become meaningful, signposting helps learners navigate their learning. McCunn and Gifford (2018) found that the number of imageable features is positively associated with a strong sense of place experiences (212). In McCunn and Gifford’s analysis, locations are illustrations of “physical codes and signs” that lead to belonging. The convergence between recognition of these “codes and signs” and the boundaries that they indicate are connected to belonging.

When it comes to academic belonging, the physical codes and signs are associated with academic places: a building designated for the study of physics has lecture halls and labs designed for physics courses. In those courses, knowledge is created in specific ways. These are indicated by other codes and signs: charts on the walls, particular equipment in labs, language that is used in syllabi, lectures, and assignments. But the epistemological codes and signs in this classroom will be quite different, say, than those in a literature classroom. That place may be differently arranged; the ways knowledge is made in each is quite distinct; the language is often very different. Combining this “sense of place” with participation in the knowledge-creating (and epistemological) boundaries of communities of practice, then, contributes to learners’ senses of academic belonging, reinforced through mutual engagement (Iverson 2010). Movement between these academic communities can also help learners

distinguish how that belonging may require different orientations or behaviors. The relationship between communities of practice, sense of place, and academic belonging is illustrated in Figure 1.

Figure 1: Relationship between Community of Practice (CoP), Sense of Place (SoP), and Academic Belonging (AB)



Individuals feel academic belonging in a community of practice when they are able to see themselves as participants at some level of that community. This occurs when they are able to use ways of creating knowledge within that community (using appropriate language, data or evidence, methods, and so on). But use alone is not enough. Individuals must recognize a distinction between that community of practice and others that they participate in—that “this place” is different from others; that they bring something to the place. This is indicated in part when individuals can interpret the “codes and signs” of the place accurately, in ways that they find and foster inclusion and positive participation. Prior to the pandemic, this belonging was certainly linked to physical location. When participation was reinforced through connection to others in the community of practice, the place, individuals also felt like they belonged, like this was “their” place.

RESEARCH METHODS

The literature we have summarized on communities of practice, place, and sense of academic belonging formed the basis for our questions for students. To learn about incoming first-year and transfer students’ experiences, we asked them about in-person and virtual learning experiences they enjoyed, felt comfortable, and/or felt like they belonged and how they experienced movements in and out of these places. We invited all incoming first-year and transfer students (n=~5000) at a large, minority-serving research university in the U.S. to participate in individual interviews. Email invitations were sent in late October 2020, week four of the 10-week quarter. We received 84 responses. Ultimately, we employed purposive sampling to select 25 students who represented a range of backgrounds with respect to gender, race, first-generation college student identity, and entry as a transfer student. We contacted these students and invited them to select times to participate in an online interview with a

member of the research team. Twenty-four of these students shared their demographic information (see Appendix). Participants completed a form in which they provided consent to participate in the study, and were informed about their rights and the researchers' obligation to maintain their anonymity.

Interviews began with two questions intended to orient students to think about place: "Where are you right now?" and "Where were you right before our discussion?" We then asked students to describe their experiences in two different learning environments, in-person and remote. More specifically, we asked them to: 1) recall and describe a class that they liked or felt positive about; 2) describe where they came from before that class and went to afterward, and 3) describe how they experienced the difference between the place that they came from and went to. The goal was to gather information not just about the learning experience within a specific course but also the context within which the learning experience was situated in relation to other courses. Although we recognized the limitation of a small sample, our goal was to gather rich student narratives. Interviews lasted approximately 30–45 minutes and were transcribed via OtterAI. Interview transcripts were coded using a qualitative coding software, Dedoose. The research team met weekly to discuss codes and emerging themes, developing a coding dictionary and then applying that to interviews in multiple rounds of analysis and calibration. What we learned about in-person classes and virtual learning environments addresses our research questions and is discussed below.

IN-PERSON SENSE OF PLACE AND SENSE OF BELONGING

Across the interviews, respondents consistently described three elements that contributed to sense of place and belonging within in-person classes: 1) rituals and rules 2) connectedness with instructors and peers, and 3) classroom configurations. They also indicated distinct signposting, signaling their transitions to (and sometimes from) courses, indicating movement into and out of distinct communities of practice. Jennifer, for instance, describes rituals and rules associated with rehearsal week in high school theater class:

And then during rehearsal week when we would actually go to my theater teacher... He has his own clubhouse like where he would put on his plays. ... [We] will go and have a rehearsal week where we do all of our sound and costumes and actual legitimate [theater]... And then we'd have maybe two, maybe three day performances. ... [G]oing to that clubhouse was always... really fun because we'd always have pizza... And there was this constant like telling everybody to shush because the teacher ... He's really nice... but when it comes to rehearsal he gets really stressed out and he gets mean, so he would yell at us, so it would, it would be constant like shushing each other by stage or in the backs, or he would like yell at us, it was awful but, despite the stress of it all, it was, it was fun.

For Jennifer, conforming to the rituals and rules, the ways of thinking and practicing, of the theater course reflected belonging and participation in the community of practice associated with the course. To her, the clubhouse is associated with the work of theater and the kinds of activities that come with being in the same physical space as others, such as sharing food and being close enough to others that monitoring noise levels becomes necessary in order to conduct work. The behaviors—the teacher, who is “mean” during rehearsal week, the “stress” and “fun”—are tied to the rituals of the theater community and to the physical space, a signal that the physical environment and who occupies it matters

and is part of what creates a sense of academic belonging in this place. Connection with peers and instructors also seemed significant for students' belonging. Discussing her high school calculus class, Nancy says,

Content wise, it wasn't my favorite class because I don't like math, but the teacher really made it. He was really good at teaching it and he was really passionate about it. It's not exactly fun because it's calculus, but...you want to be there to learn it, even if it's hard, and it was just such a good and positive environment. [He] made it accessible and almost fun for us to learn... it was just the way he explained things, and he was really thorough that like he kept our attention and kept us engaged and he asked us questions to make sure that we all got it... and he had a lot of cute little fun things hung around the classroom, just to make it more inviting.

Nancy's teacher fosters an "inviting" learning environment by decorating the classroom walls, by being "passionate," and by keeping students' attention. When one finds a place inviting and makes connections with others, one is being invited to partake, belong, and be part of the activities that are taking place. The invitation fosters the sense of connectedness to other members within the classroom, which in turn contributes to one's sense of belonging. Like Jennifer, Nancy also uses collective pronouns ("we," "us," "ours") to suggest that they are part of a collective and experience belonging to a community of practice.

Students also discussed classroom configurations in relation to their learning experience. For instance, Abraham mentions physical space in discussing a science lab:

[In the class] there would...be two tables pushed together with two people...facing each other. [It] was more of a collaborative environment that way. So instead of everyone facing the teacher and listening to the teacher on time, you're facing each other, and so that definitely caused a collaborative environment which was really good for...laboratory work or cooperative teamwork, which a lot of it was centered around group work.

Working with others was made possible by the configuration of the physical room, and this contributed to his sense of place and academic belonging. Physical proximity and the direction one faces in relation to their peers can have the direct effect of promoting learning as a social activity that takes place with others. Participation in shared practices with others are prerequisites for experiencing academic belonging. Whether the learning space was a classroom or a clubhouse, physical location was important for experiencing a sense of place and a sense of belonging. A physical place evoked feelings, shaped how and with whom learning took place, and allowed access to a community of practice. The clubhouse was associated with doing the work of theater; the calculus classroom was described as inviting. Classrooms where students face each other were viewed as directly linked to promoting teamwork. Students noted that movement into and out of learning spaces also contributed to their academic belonging, something that they described as often absent in their descriptions of remote learning. Daniel discussed what the beginning of his physics class was like and what it meant for him to enter this course.

It was my sixth period. So it was right after lunch. I'd be coming from the cafeteria because that's where we sat every day. We have our friends, and [Mr. Jenkins, the physics teacher], would

always greet us at the door. Yeah, it was like, always a handshake, and we had like this little type of handshake type of thing.

Daniel's description of the "little" handshake marks it as unique to this teacher and the beginning of the course in this physical place and his teacher's rapport and engagement with others. Based on what Daniel describes, there is evidence that part of the transition from lunch to physics class includes Mr. Jenkins intentionally and physically welcoming students to participate in a community of practice in a place designated to the study of physics.

While Daniel's account is primarily focused on the physical transition, Erin focuses on a mental switch precipitated by movement from one place to another: a psychology course to a music course.

It's more like abstractness. So, for coming in it was more like a brain switch, because I had to, you know, leave kind of the academic behind to go into like the musical and the arts, and just think about it in that way. But it didn't stop me from being excited because I'm like, Oh, I get to go talk to my other friends in this class. There was definitely... I could feel my brain thinking differently.

The cognitive transition—the "brain switch"—between different subjects is characterized by different ways of thinking; she specifically mentions feeling her "brain thinking differently" as part of this transition. She also ascribes social meaning to this switch, enthusiastically collaborating with different groups as she recounts being "excited" to speak to her "other friends." This points to subjects and courses that exist within a social world. Subjects, courses, and classes during in-person learning contain people that inhabit the same physical place, in this instance they contain "friends." When Erin enters her music class she adopts a certain way of thinking that is distinct from the type of thinking that takes place in other courses, hence the "brain switch."

For Erin, as well as the aforementioned students, there are integral connections between sense of place and academic belonging. Aspects of the class experience—a "brain switch," a special handshake from the teacher, a sense of enthusiasm, or a particular blend of stress and excitement—were all elements of academic belonging in these communities of practice. These physical signposts seemed all the more important (and their absences all the more acute) as we next discuss students' experiences of remote learning.

REMOTE SENSE OF PLACE AND SENSE OF BELONGING

Just as rituals, rules, and connectedness with instructors and peers were important for sense of place and academic belonging in in-person courses, so they were in remote courses. But in describing remote learning, students said that signposting that distinguished different communities of practice became more diffused. This clearly had implications for students' senses of academic belonging.

One of the most challenging aspects of formulating a "place" for learning were the minimal (or nonexistent) transitions from one class to another. Emma, for example, compared remote learning and in-person classes. She says,

[Changing classes during remote learning is]...really quiet. Because you don't really have anyone like talking to you about classes or like, I'm walking with you to class. Because you just have to turn on an alarm to remind you to get to class on time. I guess when you're walking to a

class, there's a lot of people and loud sounds. I don't know how to explain it. It kind of refreshes your brain, sort of, because you have something to clear your mind. Whereas online, it's just, you're constantly on the computer.

For Emma, the bustle and noise of movement between classes serves multiple purposes: reinvigoration, signposting transition, connecting with peers. The physical change of environments parallels transitions that occur as students move from classroom to classroom, using their cognitive maps and signposts to switch into a new frame of mind. Removing these physical transitions seemed to strip students of their sense of place and lessen the sense of academic belonging.

Absence of movement also presented a challenge for students as they struggled to find school-life balance. Sonya states,

I think that whenever I'm outside it is very refreshing. And it's kind of a way for me to like mentally unwind and just take a break because I think it's really hard. One thing I've noticed with online school is that it is hard to separate school and life. [G]oing on walks and... rides is a very deliberate way of separating myself from my computer and yeah and technology... I think that in general I try to get out and move between my classes because then when I come to my classes I'm more prepared, and, like, settled, I guess.

For Sonya, losing physical transitions means losing the ability to switch out of her role as a student and into her non-student life and vice versa. This empowered Sonya to create her own physical and mental change of places, attesting to the benefits of spending time outdoors and physical activity as a bolster for learning (e.g., Carpenter and Harper 2015; Twohig-Bennett and Jones 2018).

Once students "arrived" in their remote classes, many reported that it was difficult to participate as members of communities of practice. When they were able to identify rituals and rules, those were largely about non-participation—for example, keeping cameras off was a norm, rather than keeping them on. In the absence of a learning space clearly demarcated by signposts, like different people and practices, the lack of faces made it clearly difficult to connect with peers, much less the course as a shared experience. Describing her linguistics course, Amanda says,

Nobody turns on their camera. I feel bad because she [the teaching assistant] talks, and then nobody answers and then [in] the beginning of the [term] I would try to answer, but then I felt like I was the only one talking and I felt a little bit like, 'oh, it's over[.]' I was like no, [I'd] rather not [participate].

Participation in this course would mean responding to the teaching assistant's questions—learning and engaging with others. But despite invitations from the teaching assistant to join the discussion and learn as members of a class within a community of practice, Amanda found that she was the only student participating. She suggests that despite her attempts at engaging, the other participants, who are central to a community of practice, were not present. She says "it's over," meaning that she is no longer willing to participate in the course and that any hope for accessing a community is gone.

Richard, the student whose description appears in the introduction, had a similar experience with lack of connection. Describing his chemistry course, Richard says,

You're kind of eavesdropping and you understand stuff, but you're not always like too intent on participating but you'll definitely take it in, especially if [the instructor] is answering a question that you kind of want to know the answer to or you think that are like I just haven't done it yet so it's like something good to know.

While Richard said he liked the course, there is little evidence of academic belonging in his description. "Eavesdropping" implies that the speakers or those engaged in a conversation are not aware of others' listening. Eavesdroppers are outsiders listening in, suggesting that Richard characterizes himself as an outsider who is not necessarily "intent on participating." While he discloses that he understands the material, he does not view himself as an active chemistry course participant. He reports feeling this way despite him mentioning that he holds positive feelings about his professor and the course more generally. Thus, Richard's comments exemplify a student who holds a positive view of a course during remote learning, but does not necessarily experience a sense of connectedness to the instructor, teaching assistants, or peers.

Participants did not perceive the same communities of practice (or participation in them) or report feeling a sense of belonging in remote courses. Instead, they said they missed the signposting and intentional activities that foster a community of practice described as being present in their in-person courses. The absence of signposting indicates that students participated in courses, but it was not apparent that they viewed themselves as participants of communities of practice, that is, they were not necessarily learning with others by using the same language or together engaging in disciplinary practices. In stark contrast, one of the few students who described a positive experience in a remote course invoked characteristics that students associated with in person courses. Erika said that her education course was:

...one of the only classes out of the four classes I'm taking that I actually feel connected with other students because we have a group text. Also, so we'll text each other like, "hey, you know, I found this article. What do you [all] think?" Or, "hey I've interviewed this one person." And... so we were constantly encouraging each other.

Erika mentions feeling "connected with other students" and shares that her fellow peers in the group "encourag[e] each other." It is apparent that she experiences a sense of academic belonging that is made possible because she and others use technology that allows them to interact and discuss course work. The activities she discusses: texting others, sharing experiences about finding articles and interviewing, are specific to this particular community of practice.

Other students appreciated elements of remote learning that many found off-putting. Monica said that she liked not moving "because I can spend more time doing work." Nancy, too, noted the time-saving benefits of remote learning:

It really cuts down on transition times like because if I would be at campus it would take however long for me to get to that class, and then go back and then go somewhere else to study like those minutes, however long they are. They're still added up, like by months there'll be like a

couple hours that I could be using to do something else compared to like walking somewhere, going somewhere.

Underlying Monica's view is an entrenched U.S. work ethic, which values productivity and devoting more time to doing work. Nancy counts minutes and considers alternative uses for the time it takes to get to class and back. While not all are in a privileged position to slow down, stop counting minutes, and prioritize self-care, a "[be] lazy and [slow] down" approach to teaching and learning has the potential to allow for ideological and embodied shifts that could be beneficial for students (Thomas and Carvajal-Regidor 2021).

At the same time, Monica and Nancy may not value physical transitions as much as other students because they make mental transitions into learning. Nancy says,

I mean, it's still my house but it's just more, to me your bedroom becomes your classroom too. And it's not really like you changing anything, it's just more your head space like you shift from your bedroom being [a] place you sleep in and just relax to the place where you learn. And it's kind of like you just move some things around like you bring your laptop out. Clear off your desk, chair and stuff like that.

Nancy does not have difficulty shifting from relaxation to learning, as her "bedroom becomes [her] classroom." Setting up her workspace helps her get ready for class. Similarly, Monica describes her transition:

I'll usually still be here doing work before the class in the afternoon. Um, so I usually like 30 minutes before I like go get ready for it like, put on like a different shirt if it's something that I was like, just been like wearing every day or something, or, you know, fill up my water bottle or something like that so I'm still in the room but I do like, like, get ready for it I guess a little bit.

While Nancy sets up her workspace, Monica changes her clothing and refills her water bottle to make a mental transition before class. Nancy and Monica demonstrate that students may feel a physical transition is unnecessary if they are able to have a mental transition which prepares them for class. However, as Emma and Sonya discussed, having a physical transition does help with making a mental transition to learning and creating separation between work and home.

SUMMARIZING IN-PERSON AND REMOTE SENSE OF PLACE AND SENSE OF BELONGING

Based on participant interviews, the following contributed to a sense of place and academic belonging in in-person classes: 1) rituals and rules, 2) connectedness with instructors and peers, and 3) classroom configurations. Participants also highlighted the importance of signposting movements into and out of distinct communities of practice. In remote courses the following contributed to a sense of place and belonging (or lack thereof): 1) rituals and rules and 2) connectedness with instructors and peers. Most participants did not perceive the same communities of practice (or participation in them) or report academic belonging in remote courses. Additionally, signposting became more diffused with implications for participants. In remote settings, participants felt disconnected and did not participate as readily in courses, thus impacting their access to characteristics associated with communities of practice

and senses of academic belonging. However, when participants reported that text-based technology was used in remote courses, connections with peers were made. Time-saving advantages were also reported by students participating in remote instruction, indicating that students perceived some benefits associated with remote learning.

STUDY LIMITATIONS AND FUTURE RESEARCH

We chose to interview participants because we wanted to hear students' narratives in their own words, which allowed us a better understanding of their experiences. However, this limits the generalizability of the findings. In an effort to determine if similar patterns are apparent in a larger population, the qualitative results can be used to develop closed-ended survey questions that can be fielded across institutions. Educators stand to benefit from future studies that further examine students' in-person and remote learning experiences.

We propose that future studies can further delve into the significance of place and signposting in relation to a sense of belonging for specific student populations, such as minority students, under-resourced students, and first-generation college students. This exploratory study opens the door to further analysis that contributes to better understanding student experiences in remote and in-person learning environments.

RECOMMENDATIONS AND CONCLUSION

Taking into consideration what we learned about participants' experiences with in-person and remote learning, we recognized that one of the challenges students may face as campuses return to hybrid learning is a fragmented learning experience. Students do not necessarily have a sense of place or sense of academic belonging when there are no clear rituals and rules or connections with instructors and peers; campuses often rely on physical places (and signposts associated with these places) to contribute to these rules. Additionally, students often enroll in courses across disciplines, with different norms and expectations. As students go from one course to another, they move between communities of practice; signposting can be beneficial for students to recognize differences between these different learning sites. Regardless of teaching/learning modality, we suggest that intentional framing of a course as a community of practice helps students situate themselves in a course and have a defined sense of place; it also provides students an opportunity for easier movement from one course to another.

Intentional framing creates opportunities for students to situate themselves, bringing their own experiences and identities. Intentional framing can thus be used to foster access and opportunity. By access, we refer to ways of understanding and participating in knowledge-creating practices in academic communities. By opportunity, we refer to identifying ways that students can bring experiences and identities to those practices. Access and opportunity are key to academic belonging. Framing a course as a community of practice can enable students to participate in learning as a collaborative and interactive process that can assist them in developing shared practices, rituals, and strategies for learning. The process of framing creates the space for access and opportunity. Clearly demarcating what it means to be a member of the course and clarifying to students the boundaries of the course and how they fit into the discipline can make navigating a course easier for students and send a message that students belong. The more ways in which these different places for learning can be made explicit, the more students can differentiate between distinct ways of thinking and producing knowledge, thereby gaining skills that allow them to identify boundaries. This will allow students to make an easier transition between

disciplines in remote or in-person contexts because they will have recognized not just the difference in rules across courses and disciplines, but also have an opportunity to understand why such rules have been established. Additionally, providing clear explanations of how each class meeting (within a single course) is connected to the next can give students a better understanding of the learning environment they are in. This creates a sense of consistency and can foster a deeper sense of academic belonging for students. When students can see the links between class meetings, it helps shape their sense of what has taken place in the class and what their role is as members of the classroom community.

Ultimately, our research suggests that these strategies can contribute to students' sense of academic belonging, regardless of course modality. Specifically, we suggest focusing discussion around what it means for the students to be members of the particular community of practice and how they can contribute to the wellbeing of the community. Intentionally creating opportunities for students to collaborate with each other and participate in teamwork is key and can be fostered by seating configurations that encourage collaboration in in-person classes, and by utilizing technology such as online communication platforms that encourage discussion among students in remote and in-person classes. For instance, use of these platforms allows for interaction between students in large lecture courses where furniture reconfiguration, alteration of walls, or changes to any aspect of the physical classroom environment are not possible. However, use of such platforms will be most effective when it is intentional and students recognize that these platforms are there to help them engage as active members of the community of practice. Moreover, at the start of the course, instructors can ask students to fill out short surveys to learn about the values that students hold, the knowledge they have, and what they are bringing into the classroom. This signals to students that their identities are seen and valued in the course. Throughout the course, regular check-ins, pertaining to how students are doing academically and personally, acknowledges the realities and possible challenges that students experience in in-person or remote learning formats.

Our findings indicate that rituals and rules as well as connections with instructors and peers, contribute to students' sense of place and belonging (or lack thereof). We propose that the framework of community of practice can be applied not only in the analysis of student learning but can also serve as a framework for teaching practices. In the absence of physical movement, the signposting and clear delineation of course boundaries become even more important for students' learning experiences.

AUTHOR BIOGRAPHIES

Linda Adler-Kassner is associate vice chancellor of teaching and learning; faculty director of the Center for Innovative Teaching, Research, and Learning; and professor of writing studies at University of California, Santa Barbara. Her research focuses on studying and creating equitable institutional structures.

Margarita Safronova is associate director of the Center for Innovative Teaching, Research, and Learning at University of California, Santa Barbara. Her research focuses on development and implementation of teaching innovations that foster equitable learning experience for students in higher education.

Yasmine Dominguez-Whitehead is transitions director at the University of California, Santa Barbara. Her research has been broadly concerned with under-served students; race, gender, and class in higher education; and food insecurity on college campuses.

Karen Gonzalez is a graduate of the University of California, Santa Barbara (UCSB) where she earned her B.S. in psychological and brain sciences. Her research focused on student success factors among transfer students at UCSB.

Stephanie Nguyen is an undergraduate University of California, Santa Barbara student and peer mentor at the Opening Dew Doors to Accelerating Success (ONDAS) Student Center. Her work focuses on helping first-generation college students make their transition into higher education.

Malaphone Phommasa is assistant dean of Academic Success Initiatives in the Office of Teaching and Learning at the University of California, Santa Barbara. Her research focuses on providing first-generation college students and transfer students with equitable access to opportunities and resources in higher education.

NOTES

1. This name, like all names in this paper, is a pseudonym.

REFERENCES

- Adler-Kassner, Linda, John Majewski, and Damian Koshnick. 2012. "The Value of Troublesome Knowledge: Transfer and Threshold Concepts in Writing and History." In *Composition Forum* 26, np. <http://compositionforum.com/issue/26/troublesome-knowledge-threshold.php>.
- Adler-Kassner, Linda, and Elizabeth Wardle. 2015. *Naming What We Know: Threshold Concepts of Writing Studies*. Boulder: University Press of Colorado.
- Adler-Kassner, Linda, Ilene Clark, Liane Robertson, Kar Taczak, and Kathleen B. Yancey. 2016. "Assembling Knowledge: The Role of Threshold Concepts in Facilitating Transfer." In *Critical Transitions: Writing and the Question of Transfer*, edited by Chris M. Anson and Jessie L. Moore. 17–47. Boulder: University Press of Colorado.
- Agnew, John. 1987. *The United States in the World-Economy: A Regional Geography*. Cambridge: Cambridge University Press.
- Blair, Erik. 2013. "The Challenge of Contextualising the Scholarship of Teaching and Learning." *Teaching & Learning Inquiry* 1 (1): 127–30. <https://doi.org/10.2979/teachlearninqu.1.1.127>.
- Carpenter, Cathryn, and Nevin Harper. 2015. "Health and Wellbeing Benefits of Activities in the Outdoors." In *Routledge International Handbook of Outdoor Studies*, edited by Barbara Humberstone, Heather Prince, and Karla A. Henderson. 5968. New York: Routledge.
- Hounsell, Dai, and Charles Anderson. 2009. "Ways of Thinking and Practicing in Biology and History: Disciplinary Aspects of Teaching and Learning Environments." In *The University and its Disciplines: Teaching and Learning Within and Beyond Disciplinary Boundaries*, edited by Carolin Kreber. 71–83. New York: Routledge.
- Iverson, Joel O. 2010. "Knowledge, Belonging, and Communities of Practice." In *Communication and Organizational Knowledge: Contemporary Issues for Theory and Practice*, edited by Heather E. Canary and Robert D. McPhee. 45–52. New York: Routledge.
- Johnson, Christopher M. 2001. "A Survey of Current Research on Online Communities of Practice." *The Internet and Higher Education* 4 (1): 45–60. [https://doi.org/10.1016/S1096-7516\(01\)00047-1](https://doi.org/10.1016/S1096-7516(01)00047-1).
- Jorgensen, Bradley S., and Richard C. Stedman. 2011. "Measuring the Spatial Component of Sense of Place: A Methodology for Research on the Spatial Dynamics of Psychological Experiences of Places." *Environment and Planning B: Planning and Design* 38 (5): 795–813. <https://doi.org/10.1068/b37054>.
- Kirschner, Paul A., and Kwok-Wing Lai. 2007. "Online Communities of Practice in Education." *Technology, Pedagogy and Education* 16 (2): 127–31. <https://doi.org/10.1080/14759390701406737>.
- Lerner, Neal. 2016. "Writing is a Way of Enacting Disciplinarity." In *Naming What We Know: Threshold Concepts of Writing Studies*, edited by Linda Adler-Kassner and Elizabeth Wardle, 40–41. Logan: Utah State University Press.
- McCunn, Lindsay J., and Robert Gifford. 2018. "Spatial Navigation and Place Imageability in Sense of Place." *Cities* 74: 208–18. <https://doi.org/10.1016/j.cities.2017.12.006>.

- Mehdipour, Yousef, and Hamideh Zerehkafi. 2013. "Mobile Learning for Education: Benefits and Challenges." *International Journal of Computational Engineering Research* 3 (6): 93–101. http://www.ijceronline.com/papers/Vol3_issue6/part%203/P03630930100.pdf.
- Ngo, Minh, and Michael Brklacich. 2014. "New Farmers' Efforts to Create a Sense of Place in Rural Communities: Insights from Southern Ontario, Canada." *Agriculture and Human Values* 31: 53–67. <https://doi.org/10.1007/s10460-013-9447-5>.
- Nunn, Lisa M. 2021. *College Belonging: How First-Year and First-Generation Students Navigate Campus Life*. New Brunswick: Rutgers University Press.
- Patton Davis, Lori, and Samuel Museus. 2019. "What Is Deficit Thinking? An Analysis of Conceptualizations of Deficit Thinking and Implications for Scholarly Research." *NCID Currents* 1 (1). <http://dx.doi.org/10.3998/currents.17387731.0001.110>.
- Strayhorn, Terrell L. 2018. *College Students' Sense of Belonging: A Key to Educational Success for All Students*. New York: Routledge.
- Thomas, M'Balía, and Marta Carvajal-Regidor. 2021. "From 'Slow' to 'Being "Lazy" and Slowing Down'" and the Impact on Student Learning." *Teaching & Learning Inquiry* 9, (2): 1–14. <http://dx.doi.org/10.20343/teachlearningu.9.2.12>.
- Twohig-Bennett, Caoimhe, and Andy Jones. 2018. "The Health Benefits of the Great Outdoors: A Systematic Review and Meta-Analysis of Greenspace Exposure and Health Outcomes." *Environmental Research* 166: 628–37. <https://doi.org/10.1016/j.envres.2018.06.030>.
- Wenger, Etienne. 1998. "Communities of Practice: Learning as a Social System." *The Systems Thinker* 9 (5): 1–8.
- Williams, Daniel R., and Susan I. Stewart. 1998. "Sense of Place: An Elusive Concept That is Finding a Home in Ecosystem Management." *Journal of Forestry* 96 (5): 18–23. <https://doi.org/10.1016/j.envres.2018.06.030>.

APPENDIX

Participant demographics (self-reported)

Demographics	Count
Female	17
Male	7
Asian American	5
Latinx/Chicanx	6
White	9
Holding more than one ethnic identity	3
First-generation college student	8
Transfer student	5



Copyright for the content of articles published in *Teaching & Learning Inquiry* resides with the authors, and copyright for the publication layout resides with the journal. These copyright holders have agreed that this article should be available on open access under a Creative Commons Attribution License 4.0 International (<https://creativecommons.org/licenses/by-nc/4.0/>). The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited, and to cite *Teaching & Learning Inquiry* as the original place of publication. Readers are free to share these materials—as long as appropriate credit is given, a link to the license is provided, and any changes are indicated.